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SEQUENCE LISTING

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<130> 18/MG

<140> PCT/GB2003/04310

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<160> 41

<170> PatentIn version 3.1

<210> 1

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<212> PRT

<213> Artificial sequence

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<223> scTCR Linker

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Pro Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly
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Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Gly Pro
20 25 30

<210> 2

<211> 20

<212> PRT

<213> Homo sapiens

<400> 2

Asp Ser Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser
1 5 10 15

Met Asp Phe Lys
20

<210> 3

<211> 20

<212> PRT

<213> Homo sapiens

<400> 3

Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys Thr Val Leu Asp
1 5 10 15

Met Arg Ser Met
20

<210> 4

<211> 20

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<212> PRT

<213> Homo sapiens

<400> 4

Asp Ile Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys
1 5 10 15

Ser Ser Asp Lys
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<210> 5

<211> 20

<212> PRT

<213> Homo sapiens

<400> 5

Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser
1 5 10 15

Val Cys Leu Phe
20

<210> 6

<211> 20

<212> PRT

<213> Homo sapiens

<400> 6

Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu
1 5 10 15

Lys Glu Gln Pro
20

<210> 7

<211> 20

<212> PRT

<213> Homo sapiens

<400> 7

Ala Leu Asn Asp Ser Arg Tyr Ala Leu Ser Ser Arg Leu Arg Val Ser
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Ala Thr Phe Trp
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<210> 8

<211> 20

<212> PRT

<213> Homo sapiens

<400> 8

Pro Pro Glu Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His
1 5 10 15

Thr Gln Lys Ala
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<210> 9

<211> 20

<212> PRT

<213> Homo sapiens

<400> 9

Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu
1 5 10 15

Gln Pro Ala Leu
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<210> 10

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<213> Homo sapiens

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<400> 10

Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile
1 5 10 15

Ser His Thr Gln
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<210> 11

<211> 91

<212> PRT

<213> Mus musculus

<400> 11

Pro Tyr Ile Gln Asn Pro Glu Pro Ala Val Tyr Gln Leu Lys Asp Pro
1 5 10 15

Arg Ser Gln Asp Ser Thr Leu Cys Leu Phe Thr Asp Phe Asp Ser Gln
20 25 30

Ile Asn Val Pro Lys Thr Met Glu Ser Gly Thr Phe Ile Thr Asp Lys
35 40 45

Thr Val Leu Asp Met Lys Ala Met Asp Ser Lys Ser Asn Gly Ala Ile
50 55 60

Ala Trp Ser Asn Gln Thr Ser Phe Thr Cys Gln Asp Ile Phe Lys Glu
65 70 75 80

Thr Asn Ala Thr Tyr Pro Ser Ser Asp Val Pro
85 90

<210> 12

<211> 126

<212> PRT

<213> Mus musculus

<400> 12

Glu Asp Leu Arg Asn Val Thr Pro Pro Lys Val Ser Leu Phe Glu Pro
1 5 10 15

Ser Lys Ala Glu Ile Ala Asn Lys Gln Lys Ala Thr Leu Val Cys Leu
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20

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25 30

Ala Arg Gly Phe Phe Pro Asp His Val Glu Leu Ser Trp Trp Val Asn
35 40 45

Gly Arg Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Ala Tyr Lys
50 55 60

Glu Ser Asn Tyr Ser Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser Ala
65 70 75 80

Thr Phe Trp His Asn Pro Arg Asn His Phe Arg Cys Gln Val Gln Phe
85 90 95

His Gly Leu Ser Glu Glu Asp Lys Trp Pro Glu Gly Ser Pro Lys Pro
100 105 110

Val Thr Gln Asn Ile Ser Ala Glu Ala Trp Gly Arg Ala Asp
115 120 125

<210> 13

<211> 20.

<212> PRT

<213> *Mus musculus*

<400> 13

Glu Ser Gly Thr Phe Ile Thr Asp Lys Thr Val Leu Asp Met Lys Ala
1 5 10 15

Met Asp Ser Lys
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<210> 14

<211> 20

<212> PRT

<213> *Mus musculus*

<400> 14

Lys Thr Met Glu Ser Gly Thr Phe Ile Thr Asp Lys Thr Val Leu Asp
1 5 10 15

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Met Lys Ala Met
20

<210> 15

<211> 20

<212> PRT

<213> Mus musculus

<400> 15

Tyr Ile Gln Asn Pro Glu Pro Ala Val Tyr Gln Leu Lys Asp Pro Arg
1 5 10 15

Ser Gln Asp Ser
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<210> 16

<211> 20

<212> PRT

<213> Mus musculus

<400> 16

Ala Val Tyr Gln Leu Lys Asp Pro Arg Ser Gln Asp Ser Thr Leu Cys
1 5 10 15

Leu, Phe Thr Asp
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<210> 17

<211> 20

<212> PRT

<213> Mus musculus

<400> 17

Asn Gly Arg Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Ala Tyr
1 5 10 15

Lys Glu Ser Asn
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<210> 18

<211> 20

<212> PRT

<213> *Mus musculus*

<400> 18

Lys Glu Ser Asn Tyr Ser Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser
1 5 10 15

Ala Thr Phe Trp
20

<210> 19

<211> 20

<212> PRT

<213> *Mus musculus*

<400> 19

Pro Pro Lys Val Ser Leu Phe Glu Pro Ser Lys Ala Glu Ile Ala Asn
1 5 10 15

Lys Gln Lys Ala
20

<210> 20

<211> 20

<212> PRT

<213> *Mus musculus*

<400> 20

Arg Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Ala Tyr Lys Glu
1 5 10 15

Ser Asn Tyr Ser
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<210> 21

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<211> 20

<212> PRT

<213> *Mus musculus*

<400> 21

Val Thr Pro Pro Lys Val Ser Leu Phe Glu Pro Ser Lys Ala Glu Ile
1 5 10 15

Ala Asn Lys Gln
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<211> 24

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cacagacaaa tgtgtgctag acat

24

<210> 23

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 23
atgtctagca cacatggc tgtg

24

<210> 24

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 24

cagtgggtc tgcacagacc c

21

<210> 25

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 25

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21

<210> 26

<211> 37

<212> DNA

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<223> Primer

<400> 26

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<210> 27

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<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 27

ttggggccgc cggatccgcc cccggggaa ctttctgggc tgggg

45

<210> 28

<211> 45

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 28

tccccccgggg gcggatccgg cggggcccaac gctggtgtca ctcag

45

<210> 29

<211> 32

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 29

gggaagctta gtctgctcta ccccaggcct cg

32

<210> 30

<211> 39

<212> DNA

<213> Artificial sequence

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<223> Primer

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39

<210> 31

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 31
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<210> 32

<211> 37

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 32
gcggatccgg cggatccgg tcgggtggcg gtggctc

37

<210> 33

<211> 38

<212> DNA

<213> Artificial sequence

<220>

<223> Primer

<400> 33
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38

<210> 34

<211> 35

<212> PRT

<213> Artificial sequence

<220>

<223> scTCR Linker

<400> 34

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Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly
 20 25 30

Gly Gly Pro
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 <211> 621
 <212> DNA
 <213> Homo sapiens

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 aggtttacag cacagctcaa taaagccagc cagtatgtt ctctgctcat cagagactcc 240
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 gtgctagaca tgaggtctat ggacttcaag agcaacagtg ctgtggcctg gagcaacaaa 540
 tctgactttg catgtgcaaa cgccttcaac aacagcatta ttccagaaga caccttcttc 600
 cccagccag aaagttccta a 621

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 <211> 741
 <212> DNA
 <213> Homo sapiens

<400> 36
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 ggcatggggc tgaggctgat tcattactca gttggtctg gtatcactga ccaaggagaa 180
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<210> 37

<211> 206

<212> PRT

<213> Homo sapiens

<400> 37

Met Gln Lys Glu Val Glu Gln Asn Ser Gly Pro Leu Ser Val Pro Glu
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Gly Ala Ile Ala Ser Leu Asn Cys Thr Tyr Ser Asp Arg Gly Ser Gln
 20 25 30

Ser Phe Phe Trp Tyr Arg Gln Tyr Ser Gly Lys Ser Pro Glu Leu Ile
 35 40 45

Met Ser Ile Tyr Ser Asn Gln Asp Lys Glu Asp Gly Arg Phe Thr Ala
 50 55 60

Gln Leu Asn Lys Ala Ser Gln Tyr Val Ser Leu Leu Ile Arg Asp Ser
 65 70 75 80

Gln Pro Ser Asp Ser Ala Thr Tyr Leu Cys Ala Val Thr Thr Asp Ser
 85 90 95

Trp Gly Lys Leu Gln Phe Gly Ala Gly Thr Gln Val Val Val Thr Pro
 100 105 110

Asp Ile Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys
 115 120 125

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6 Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Asp Ser Gln Thr
130 135 140

Asn Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys Cys
145 150 155 160

Val Leu Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val Ala
165 170 175

Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Asn Asn Ser
180 185 190

Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser
195 200 205

<210> 38

<211> 246

<212> PRT

<213> Homo sapiens

<400> 38

Met Asn Ala Gly Val Thr Gln Thr Pro Lys Phe Gln Val Leu Lys Thr
1 5 10 15

Gly Gln Ser Met Thr Leu Gln Cys Ala Gln Asp Met Asn His Glu Tyr
20 25 30

Met Ser Trp Tyr Arg Gln Asp Pro Gly Met Gly Leu Arg Leu Ile His
35 40 45

Tyr Ser Val Gly Ala Gly Ile Thr Asp Gln Gly Glu Val Pro Asn Gly
50 55 60

Tyr Asn Val Ser Arg Ser Thr Thr Glu Asp Phe Pro Leu Arg Leu Leu
65 70 75 80

Ser Ala Ala Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser Arg Pro
85 90 95

Gly Leu Ala Gly Gly Arg Pro Glu Gln Tyr Phe Gly Pro Gly Thr Arg
100 105 110

Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala
115 120 125

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* val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr
130 135 140

Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser
145 150 155 160

Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Cys Thr Asp Pro
165 170 175

Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Ala Leu
180 185 190

Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asp Pro Arg Asn
195 200 205

His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu
210 215 220

Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu
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Ala Trp Gly Arg Ala Asp
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<211> 90

<212> DNA

<213> Artificial Sequence

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<223> DNA encoding scTCR linker

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<211> 1446

<212> DNA

<213> Artificial sequence

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<223> sc Dis TCR

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cagtttgag cagggaccca gttgtggtc accccagata tccagaaccc tgaccctgcc 360
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gtgtgcctgg ccacaggctt ctaccccgac cacgtggagc tgagctggtg ggtgaatggg 1200
aaggaggtgc acagtggggt ctgcacagac ccgcagcccc tcaaggagca gcccgcctc 1260
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ccccgcaacc acttccgctg tcaagtccag ttctacgggc tctcggagaa tgacgagtgg 1380
acccaggata gggccaaacc cgtcaccagg atcgtcagcg ccgaggcctg gggtagagca 1440
gactaa 1446

<210> 41

<211> 481

<212> PRT

<213> Artificial sequence

<220>

<223> sc DIS TCR

<400> 41

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1 5 10 15Gly Ala Ile Ala Ser Leu Asn Cys Thr Tyr Ser Asp Arg Gly Ser Gln
20 25 30Ser Phe Phe Trp Tyr Arg Gln Tyr Ser Gly Lys Ser Pro Glu Leu Ile
35 40 45Met Ser Ile Tyr Ser Asn Gly Asp Lys Glu Asp Gly Arg Phe Thr Ala
50 55 60Gln Leu Asn Lys Ala Ser Gln Tyr Val Ser Leu Leu Ile Arg Asp Ser
65 70 75 80Gln Pro Ser Asp Ser Ala Thr Tyr Leu Cys Ala Val Thr Thr Asp Ser
85 90 95Trp Gly Lys Leu Gln Phe Gly Ala Gly Thr Gln Val Val Val Thr Pro
100 105 110Asp Ile Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys
115 120 125Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Asp Ser Gln Thr
130 135 140Asn Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys Cys
145 150 155 160Val Leu Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val Ala
165 170 175Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Asn Asn Ser
180 185 190Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Pro Gly
195 200 205Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly
210 215 220

Gly Ser Gly Gly Gly Ser Gly Gly Gly Pro Asn Ala Gly Val
225 230 235 240

Thr Gln Thr Pro Lys Phe Gln Val Leu Lys Thr Gly Gln Ser Met Thr
245 250 255

Leu Gln Cys Ala Gln Asp Met Asn His Glu Tyr Met Ser Trp Tyr Arg
260 265 270

Gln Asp Pro Gly Met Gly Leu Arg Leu Ile His Tyr Ser Val Gly Ala
275 280 285

Gly Ile Thr Asp Gln Gly Glu Val Pro Asn Gly Tyr Asn Val Ser Arg
290 295 300

Ser Thr Thr Glu Asp Phe Pro Leu Arg Leu Leu Ser Ala Ala Pro Ser
305 310 315 320

Gln Thr Ser Val Tyr Phe Cys Ala Ser Arg Pro Gly Leu Ala Gly Gly
325 330 335

Arg Pro Glu Gln Tyr Phe Gly Pro Gly Thr Arg Leu Thr Val Thr Glu
340 345 350

Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser
355 360 365

Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala
370 375 380

Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp Trp Val Asn Gly
385 390 395 400

Lys Glu Val His Ser Gly Val Cys Thr Asp Pro Gln Pro Leu Lys Glu
405 410 415

Gln Pro Ala Leu Asn Asp Ser Arg Tyr Ala Leu Ser Ser Arg Leu Arg
420 425 430

Val Ser Ala Thr Phe Trp Gln Asp Pro Arg Asn His Phe Arg Cys Gln
435 440 445

Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp Arg
450 455 460

Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly Arg Ala
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Asp